BOARD MEETING DATE: November 1, 2019 AGENDA NO. 7

PROPOSAL: Recognize Revenue, Appropriate Funds, and Issue Solicitations and Purchase Orders for Air Monitoring Programs

SYNOPSIS: South Coast AQMD expects to receive U.S. EPA Section 105 Grant funds up to $794,261 for the FY 2020 (28th Year) PAMS Program. During the first quarter of FY 2019-20, $54,965 has been spent on unbudgeted capital assets for replacement of air monitoring equipment, and in December 2018, the Board authorized restoration of $222,500 from the General Fund Undesignated (Unassigned) Fund Balance in support of the criteria pollutant air monitoring network. These actions are to: 1) recognize revenue and appropriate funds when they become available for the PAMS Program; 2) appropriate funds from the General Fund Undesignated (Unassigned) Fund Balance into the District General FY 2019-20 Budget; 3) appropriate funds from the General Fund Undesignated (Unassigned) Fund Balance into Science & Technology Advancement's FY 2019-20 Budget; and 4) issue solicitations and purchase orders for air monitoring equipment.

COMMITTEE: Administrative, October 11, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue, upon receipt, and appropriate funds in the amount of $404,261 ($390,000 was previously included in Salaries & Employee Benefits within the FY 2019-20 Budget) for the U.S. EPA Section 105 Grant for the 28th Year PAMS Program into Science & Technology Advancement's (STA) (Org 47) FYs 2019-20 and/or 2020-21 Budgets, Services and Supplies and Capital Outlays Major Objects, as set forth in Table 1.
2. Appropriate $54,965 from the General Fund Undesignated (Unassigned) Fund Balance to the District General FY 2019-20 Budget, Capital Outlays Major Object, Capital Outlays Account (unbudgeted capital assets), to restore funds used to replace air monitoring equipment.
3. Appropriate $222,500 from the General Fund Undesignated (Unassigned) Fund Balance to the STA FY 2019-20 (Org 44) Budget, Capital Outlays Major Object, Capital Outlays Account, for the replacement of criteria pollutant network equipment listed in Table 2.

4. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue "Prior Bid, Last Price" purchase orders or a solicitation(s), as needed, followed by a purchase order for the equipment listed in Table 2, as follows:
    a. Up to eight gas dilution systems in an amount not to exceed $178,000; and
    b. Up to five ozone monitors in an amount not to exceed $44,500.
5. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue sole source or "Prior Bid, Last Price' purchase orders, or a solicitation(s), as needed, followed by a purchase order, for the equipment listed in Table 3, as follows:
    a. Up to two portable gas dilution systems in an amount not to exceed $25,000;
    b. Up to two NO/NOx monitors in an amount not to exceed $25,000;
    c. Up to three Teledyne API Model T701H Zero (Pure) Air Generators in an amount not to exceed $25,000; and
    d. One Thermo ISQ-EC Mass Spectrometer and associated equipment in an amount not to exceed $90,000.
6. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue sole source purchase orders with FluxSense, Inc., in an amount not to exceed $120,700 for instrument installation and related services and supplies.

Wayne Nastri
Executive Officer

MMM:JCL:RMB:AP:ld

Background

PAMS Program

In February 1993, the U.S. EPA promulgated the PAMS regulations for areas classified as serious, severe or extreme nonattainment. These regulations require the South Coast AQMD to conduct monitoring for ozone precursors with enhanced monitoring equipment at multiple sites. The PAMS Program also funds the meteorological upper air stations located at LAX and Ontario airports, along with Irvine and Moreno Valley. Since the onset of the PAMS Program, the U.S. EPA has annually allocated Section 105 Grant funds in support of this requirement.

Budget

The Draft FY 2018-19 Budget request included replacement instruments for gaseous measurements in the amount of $445,000. During the FY 2018-19 Annual Budget review process, the Board directed staff to reduce budgeted expenditures to achieve a balanced budget with the understanding that the reductions could be restored if necessary as a mid-year FY 2018-19 budget adjustment dependent on the year end

FY 2017-18 financial results. This included reducing the $445,000 allocation for equipment to $222,500. In the December 2018 Board letter, the Board approved the restoration of $3,611,776 to the FY 2018-19 Budget including $222,500 for the replacement of instruments for gaseous measurements. The December Board letter did not include an action to authorize issuing solicitations and/or purchase orders for these instruments. In addition, the adopted FY 2019-20 Budget included $75,000 for unbudgeted capital assets to provide for unforeseen needed equipment.

MATES V

Since January 2018, the South Coast AQMD has been conducting monitoring at ten fixed locations as part of MATES V. The main purpose of MATES V is to characterize long-term regional air toxics levels in residential and commercial areas. However, the majority of the fixed-site MATES V monitoring is not intended to provide real-time data, nor target "hot spots" near major pollution sources. Thus, advanced technologies were deployed to complement fixed-site monitoring and conduct enhanced air toxics measurements at local scales with a focus on EJ communities near refineries. In November 2017, the Board authorized purchase orders to FluxSense, Inc., in an amount not to exceed $1,300,000 for remote sensing measurement equipment and related services and supplies in FYs 2017-18 and 2018-19, but not all of these purchases were initiated by June 30, 2019.

Proposal

PAMS Program

The estimated U.S. EPA Section 105 Grant for the 28th Year PAMS Program funding is $794,261 based on the 27th Year PAMS Program funding levels. This action is to recognize revenue, upon receipt, and appropriate a portion of the estimated funds in the amount of $404,261 (with the remainder of $390,000 already included in Salaries and Employee Benefits within the FY 2019-20 Budget) into the Services and Supplies and Capital Outlays Major Objects in STA's FYs 2019-20 and/or 2020-21 Budgets, as set forth in Table 1. The U.S. EPA concurs with staff's proposed allocation.

Budget

During the first quarter of FY 2019-20, $54,965 was spent on capital assets for the replacement of air monitoring equipment. This action is to appropriate $54,965 from the General Fund Undesignated (Unassigned) Fund Balance to the District General FY 2019-20 Budget, Capital Outlays Major Object, Capital Outlays Account (unbudgeted capital assets), to restore these funds for potential future use. In addition, because there was no authorization to purchase the replacement of instruments for gaseous measurements in the December 2018 Board letter, this action is to appropriate $222,500 and authorize the purchase of air monitoring equipment as set forth in Table 2.

Proposed Purchases and Purchasing Methods

Gas Dilution Systems
U.S. EPA requires the measurement of criteria pollutants at multiple sites. Periodic calibration of the air monitors is required to meet U.S. EPA quality control criteria. Gas dilution systems are necessary to provide a known concentration of gas standard required for the calibration of air monitoring equipment. The current gas dilution systems are greater than ten years old and are in need of replacement. The approximate cost for up to eight gas dilution systems is $178,000 (see Table 2). The purchase will be made by "Prior Bid, Last Price" or through a solicitation process, as needed, followed by issuance of a purchase order(s).

Ozone Monitors
U.S. EPA requires the measurement of ozone for areas in non-attainment. South Coast AQMD operates a network of 28 ozone monitors to obtain data regarding public exposure to air contaminants. Many of the ozone monitors have been replaced, but the remaining five instruments are greater than ten years old and are in need of replacement. The approximate cost for up to five ozone monitors is $44,500 (see Table 2). The purchase will be made by "Prior Bid, Last Price" or through a solicitation process, as needed, followed by issuance of a purchase order(s).

Portable Gas Dilution Systems
U.S. EPA's PAMS Program requires the measurement of ozone precursors with enhanced monitoring equipment at multiple sites. Periodic calibration of the air monitors is required to meet U.S. EPA quality control criteria. Gas dilution systems are necessary to provide a known concentration of gas standard required for the calibration of air monitoring equipment. The current gas dilution systems are greater than ten years old and are in need of replacement. The purchase order will be made by "Prior Bid, Last Price" or through an informal solicitation, if necessary, as allowed by the South Coast AQMD's Procurement Policy and Procedure which authorizes informal bids for equipment under $25,000. The estimated cost for two gas dilution systems is approximately $25,000.

NO/NOx Monitors
PAMS requirements include monitoring for NO/NOx as a means of determining nitrogen dioxide (NO2). The estimated cost of a NO/NOx monitor is $12,500. The purchase will be made by "Prior Bid, Last Price" or through an informal solicitation, if necessary, as allowed by the South Coast AQMD's Procurement Policy and Procedure which authorizes informal bids for equipment under $25,000. The estimated cost for up to two NO/NOx monitors is approximately $25,000.

Zero Air Generators
Zero air generators are necessary to deliver contaminant-free air required for the operation of air monitoring equipment in support of PAMS measurement and audit requirements. The purchase will be made by "Prior Bid, Last Price" or through an informal solicitation, if necessary, as allowed by the South Coast AQMD's Procurement Policy and Procedure which authorizes informal bids for equipment under $25,000. The estimated cost for up to three zero air generators is approximately $25,000.

Mass Spectrometer
Ultra High Performance Liquid Chromatography (UHPLC) is used to detect several analytes of interest under the PAMS Program. This mass spectrometer will be connected to the laboratory's existing UHPLC. It will allow for the deconvolution of co-eluding compounds and assist with the identification of unknown contaminants. This will result in a higher quality of data and aid in the troubleshooting of any future sampling issues. The estimated cost for one Thermo ISQ-EC mass spectrometer and associated equipment is $90,000 and is available from only one source.

MATES V
This action is to authorize the Procurement Manager to issue the remaining purchase orders with FluxSense, Inc., in an amount not to exceed $120,700 in FY 2019-20 to complete the installation of the optical remote sensing equipment and related services and supplies.

Sole Source Justification
Section VIII.B.3 of the South Coast AQMD's Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified when funded in whole or in part with federal funds. Requests for sole source purchases from Thermo Fisher Scientific Inc. is made under Section VIII.B.3.a. The item is only available from one source. The mass spectrometer sold by Thermo Fisher Scientific Inc. is the only mass spectrometer that will work with the laboratory's current Thermo UHPLC and associated instrumental software.

Resource Impacts
The U.S. EPA Section 105 Grant funding will support the operation of the PAMS Program and fund Capital Outlays, Supplies and Services, and Salaries and Employee Benefits to meet necessary objectives of the Program. Upon approval of this Board letter, sufficient funding will be available in the FY 2019-20 Budget.

Attachments
Table 1: Proposed 28th Year PAMS Expenditures for FYs 2019-20 and/or 2020-21
Table 2: Proposed STA Capital Outlay Expenditures for FY 2019-20
Table 3: Proposed PAMS Capital Outlay Expenditures for FYs 2019-20 and/or 2020-21

Table 1
Proposed 28th Year PAMS Expenditures for FYs 2019-20 and/or 2020-21

Account Description	Account Number	Program Code	Estimated Expenditure
Services & Supplies Major Object:			
Rents & Leases Equipment	67300	47530	$500
Rents & Leases Structure	67350	47530	8,000
Professional and Special Services: Data Management and Analysis	67450	47530	18,100
Professional and Special Services: Relocate, Calibrate & Certify PAMS Auto-GC	67450	47530	22,000
Temp Agency Services	67460	47530	5,000
Demurrage Expenses	67550	47530	10,000
Maintenance of Equipment	67600	47530	70,000
Building Maintenance	67650	47530	9,000
Travel	67800	47530	5,000
Communications	67900	47530	1,973
Laboratory Supplies	68050	47530	57,000
Office Expense	68100	47530	5,000
Small Tools, Instruments, Equipment	68300	47530	21,688
Training	69500	47530	6,000
Total Services & Supplies Major Object:			**$239,261**
Capital Outlays Major Object:			
Portable Gas Dilution Systems (Up to 2)	77000	47530	$25,000
NO/NOx Monitors (Up to 2)	77000	47530	25,000
Zero (Pure) Air Generator (Up to 3)	77000	47530	25,000
LC Mass Spectrometer	77000	47530	90,000
Total Capital Outlays Major Object:			**$165,000**
FY 2019-20 and/or FY 2020-21 Appropriations			**$404,261**

*$390,000 was previously included in Salaries & Employee Benefits within the FY 2019-20 Budget.

Table 2
Proposed STA Capital Outlay Expenditures for FY 2019-20

Description	Qty	Estimated Amount	Contracting Method
Gas Dilution Systems	Up to 8	$178,000	'Prior Bid, Last Price' or Solicitation
Ozone Monitors	Up to 5	$44,500	'Prior Bid, Last Price' or Solicitation
Total		**$222,500**	

Note: Quantities in Table 2 and 3 may be adjusted as monitoring needs are identified (not to exceed total estimated amount)

Table 3
Proposed PAMS Capital Outlay Expenditures for FYs 2019-20 and/or 2020-21

Description	Qty	Funding Source	Estimated Amount	Contracting Method
Portable Gas Dilution Systems	Up to 2	PAMS 28th Year	$25,000	'Prior Bid, Last Price' or Solicitation
NO/NOx Monitors	Up to 2	PAMS 28th Year	$25,000	'Prior Bid, Last Price' or Solicitation
Teledyne API Model T701H Zero (Pure) Air Generators	Up to 3	PAMS 28th Year	$25,000	'Prior Bid, Last Price' or Solicitation
Thermo ISQ-EC Mass Spectrometer and Associated Equipment	1	PAMS 28th Year	$90,000	Sole Source
Total			**$165,000**	

Note: Budgeted in Capital Outlays Major Object in Table 1